**ILLEGIB** 

DOE review completed.

JCS review completed.



		SIGNATURE	REC	ORD	AN	0 0	OVER SHEET		6
	DO	CUMENT DESCRIPTION					REGISTRY		
COPY NO LUMBER LUMBER	DOCUME IMBER (S OF PAGE OF ATTA	): one copy s: one Document CHMENTS: three-Cy #	NO. 8 of C	si/sr	DAT LOC 15/49	Е DOC GED В /1 & 1	15/49; Voting Sli	p ·	TELLICENCE
AGENCY (AS IT IS TO THOSE CONTROL	OR CLASSII DOWNGRAI I INDIVIDU OFFICER V	FORM WILL BE ATTACHED THED TOP SECRET WITHIN TOP DED, DESTROYED OR TRANSMALS WHOSE OFFICIAL DUTING THE RECEIVES AND/OR RELESTODY IN THE LEFT—HAND COUNTY THE DATE OF HANDLING	THE CIA MITTED ES RELA ASES TH OLUMNS	AND W OUTSIDE TE TO E ATTA PROVID	ILL REM E OF CI THE MAT CHED TOI	AIN AI A. ACC ERIAL. P SECRET NAME C	TACHED TO THE DOCUMENT OF SECRET IN EACH ALTERNATE OR A TENDER THE SIGN OF EACH INDIVIDUAL WE RIGHT—HAND COLUMNS	MATERIAL SSISTANT THIS FOR HO HAS SE	IS LIMITED ! TOP SECRET
REFERR	D TO	RECEIVED	;		RELE			N BY	D . T.C
0FF1 1 DIRECT	OR	SIGNATURE	DATE	TIME	DATE	TIME	NAME & OFFICE S	TABOL	DATE
FILE	19/4.								
				-					
- J (10 (10 (10 (10 (10 (10 (10 (10 (10 (10					·	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	JOB NO. 800	1731	
the cold control planes and the A-13 and		TOCUMENT NO. 50 NO CHANGE IN CLASS TO DECLASSIFIED	)				BOX NO.	9	
1		SLASS. CHANGED FO: TS S C JEXT REVIEW DATE: 26 JUTHI HR 10.2 PATE 21/3/81 REVIEWER		.h		)	FOLDER LO 2		
and a second place of the first of the second or the second of the second or the secon					DETAC		WILL BE COMPLETE	D IN THE	APPROPRI

ORM NO. 38.13 PREVIOUS EDITIONS NOT TO BE USED BR 1948

atomic Energy

TOP SECRET

CSI

# CENTRAL INTILLIGENCE AGENCY

WOLMAR THERMY BRANCH

STATUS OF THE U.S.S.R. ATOMIC ENSIGY PROJECT An Extended Estimate for the Joint Staff Plans Group of the Joint Chiefs of Staff

1 October 1949

081/88-15/49/1

MARNING: For Limited distribution only.

OCUMENT NO:	49
O CHANGE IN CLASS	
DECLASSIFIED CLASS, CHANGED TO:	TS S @ 25X1
AUTH 31 31 31 84	REVIEWER

This report has been agreed upon by the mombers of the Joint Mucleum Energy Intelligence Committee which is composed of representatives of the Departments of State, Army, Mavy, and Air Force, the Atomic Energy Commission, and the Central Intelligence Agency.

Approved For Release 2009/06/03 : CIA-RDP80R01731R000800100051-1

# STATUS OF THE U.S.S.R. ATOMIC ENERGY PROJECT

The Joint Nuclear Energy Entelligence Committee makes the following estimate of future U.S.S.R. bomb capabilities in the light of recent events.

- 1. The explosion, somewhere in Siberia on or about 28 August 1949, of a Soviet atomic bomb (presumably their first) made of plutonium confirms our previous conclusion that the Soviet atomic energy project was directed toward the production of plutonium bombs.
- 2. The fixing of this date has made possible the reevaluation of much fragmentary information which previously we could not interpret. This reevaluation, together with some new information, leads to the following conclusion:

The U.S.S.R. has had one and possibly two graphite-moderated production piles in operation since about October 1948. It is suspected that there is a third production pile under construction which may be in operation shortly. There is no evidence or indication that the Soviets are developing a uranium isotope separation process at the present time.

3. Based on this conclusion, on current estimates of the maximum account of uranium available, on the assumption that the first bomb assembled was tested immediately, and on the assumption that their plants will operate at high efficiency, it is estimated that the maximum number of bombs in the Soviet stockpile will be roughly:

10 by the end of 1949 25 by mid-1950 50 by mid-1951 75 by mid-1952 110 by mid-1953

(For long range planning purposes after mid-1953, the bomb production race may be assumed to be 40 per year; Nagasaki-type bombs have been assumed for purpose of calculation.) In making these estimates based on a plutonium bomb, it is assumed that the Soviets will put into effect by mid-1950 the more important improved procedures in pile operation recently instituted in the U.S.

4. The ultimate bomb stockpile depends not only on the supply of unantumore, but also on the efficiency of the methods producing the fissionable materials. It is believed that the uranium ore supply is not a limiting factor now. The successful application of production methods which we can now envision will provide a more efficient utilization of their limited (relative to the U.S.) stockpile of uranium and will increase the ultimate stockpile by a substantial factor. Additional production facilities will be needed to increase the production rate significantly.

# TOP SECRET

CSI

#### CENTRAL INTELLIGENCE AGENCY

NICLEAR ENERGY BRANCH

STATUS OF THE U.S.S.R. ATOMIC ENERGY PROJUCT

1 October 1949

OS[/SR-15/49

WARLING: This document may not be reproduced without prior approval of the Director of Central Intelligence.

COCUMENT RO.	48	
Deglassified     Class. Changed to:     Next review date:     ■	TS S ®	25X1
DATE 3/19/5/		

This report has been agreed upon by the members of the Joint Nuclear Energy Intelligence Committee which is composed of representatives of the Departments of State, Army, Navy, and Air Force, the Atomic Fnergy Commission, and the Central Intelligence Agency.



## STATUS OF THE U.S.S.R. ATOMIC ENERGY PROJECT

The Joint Nuclear Energy Intelligence Committee makes the following estimate of future U.S.S.R. bomb capabilities in the light of recent events.

- 1. The explosion, somewhere in Siberia on or about 18 August 1949, of a Soviet atomic bomb (presumably their first) made of plutonium confirms our previous conclusion that the Soviet atomic energy project was directed toward the production of plutonium bombs.
- 2. The fixing of this date has made possible the recvaluation of much fregmentary information which previously we could not interpret. Based on this reevaluation and some new information, on current estimates of the maximum amount of uranium available, on the assumption that the first bomb assembled was tested immediately, and on the assumption that their plants will operate at high efficiency, it is estimated that the maximum number of bombs in the Soviet stockpile will be roughly:

10 by the end of 1949 50 by mid-1951 110 by mid-1953

In making these estimates based on a plutonium bomb, it is assumed that the Soviets will put into effect by mid-1950 the more important improved procedures in pile operation recently instituted in the U. S.

			Heinter 1	ho: TCAPS			
J. 200	<ul> <li>Approved For Release</li> </ul>	: 2009/06/03 : CIA-RDP8	30R01731R00080010	00051-1 o s	8 54	M 1	W
		3		ه داریسب	3 1700	14 *	11.0

## VOTING SLIP

					2242.03	entire and the second	go dani yakong nagyang katik nya tang apalahatan sa sa k	de Samp Fils
					DA TE			
ornario de	T)	007/07 3	<i></i>	- A - A - A - A - A - A - A - A - A - A		v.c		
SUBURCT	meport	US1/ SR-1	5/49/1, u	ated 1 Oc	coper 12	<b>14</b> 9		
Approved	[ \$	emanagangga Madhallan senerah pembangga	ingila pilatini pinatapiny risisima	t el quel a la lina I agino presi el la superindigio en ante gui	an Courte de Louis de la 1930	क्षेत्रः अनुसर्वेषपुर्वसम्बद्धः वर्षेत्रस्य वर्षेत्रस्य वर्षेत्रस्य	and constituted the Artistical leader with the	dalugi segledi
Approve <b>d</b>	with the	followin	g excepti	onė:				
Approved	with the	followin	g excepti	onė:				colinial kap op
		followin	g excepti	नर्थन्त्र स्तु प्रमुक्तिकानुक द्वन्त्र अस्त्रस्य स्त्रम् स्वरूपम् स्त्रीत्रस्य स्त्रम्	er e	raspi, servior versilliga, metaskylde ellifektildi.		rocketski kale och
		radia Wang san-Antonyahag San dia mang talahad Mala	g excepti	नर्थन्त्र स्तु प्रमुक्तिकानुक द्वन्त्र अस्त्रस्य स्त्रम् स्वरूपम् स्त्रीत्रस्य स्त्रम्	er e	raspi, servior versilliga, metaskylde ellifektildi.	angirt ta gerjandin samaniya kahila ga kita ayan dagan ar sa sajan	collectivity and an analysis of the second analysis of the second analysis of the second and an analysis of the second analysis of the second and an analysis of the second and an analysi
		radia Wang san-Antonyahag San dia mang talahad Mala	g excepti	नर्थन्त्र स्तु प्रमुक्तिकानुक द्वन्त्र अस्त्रस्य स्त्रम् स्वरूपम् स्त्रीत्रस्य स्त्रम्	er e	raspi, servior versilliga, metaskylde ellifektildi.	angirt ta gerjandin samaniya kahila ga kita ayan dagan ar sa sajan	
		radia Wang san-Antonyahag San dia mang talahad Mala	g excepti	नर्थन्त्र स्तु प्रमुक्तिकानुक द्वन्त्र अस्त्रस्य स्त्रम् स्वरूपम् स्त्रीत्रस्य स्त्रम्	er e	raspi, servior versilliga, metaskylde ellifektildi.	angirt ta gerjandin samaniya kahila ga kita ayan dagan ar sa sajan	ing and a second
		radia Wang san-Antonyahag San dia mang talahad Mala	g excepti	नर्थन्त्र स्तु प्रमुक्तिकानुक द्वन्त्र अस्त्रस्य स्त्रम् स्वरूपम् स्त्रीत्रस्य स्त्रम्	er e	raspi, servior versilliga, metaskylde ellifektildi.	angirt ta gerjandin samaniya kahila ga kita ayan dagan ar sa sajan	and an all and a second se
		radia Wang san-Antonyahag San dia mang talahad Mala	g excepti	नर्थन्त्र स्तु प्रमुक्तिकानुक द्वन्त्र अस्त्रस्य स्त्रम् स्वरूपम् स्त्रीत्रस्य स्त्रम्		raspi, servior versilliga, metaskylde ellifektildi.	angirt ta gerjandin samaniya kahila ga kita ayan dagan ar sa sajan	